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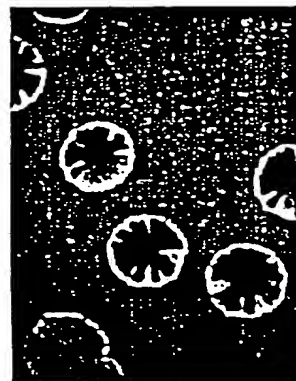
*ade2Δ ade3Δ mec1-1 sml1-1 (pRS416-ADE3-MEC1)*



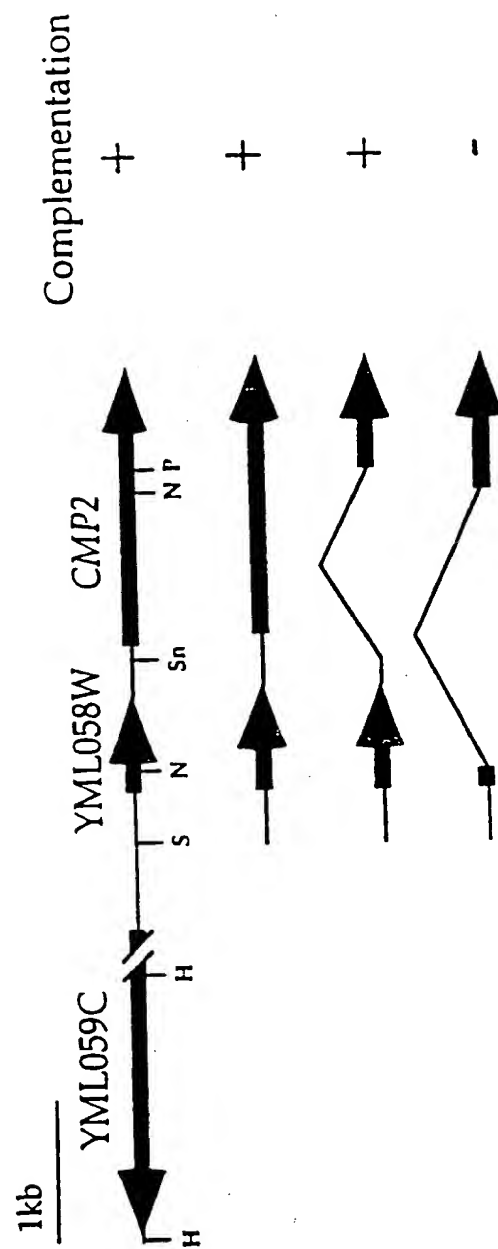
plasmid containing SML1



plasmid containing other genes



**FIG. 1B**



**FIG. 1C**

AATGAGCAACCGTGTCACAAGAGGTGTCAAGACCGGCTACTTATTCCCAAGGATCACGTTCTCTCGCCAACATCATTG  
 CCGTCGAACGTCGGCGCGGCTCTTCTGACATTGGTAAGAATACITCCAACCTAAGAGCATGCTTCTCTTTTTTTTTTTT  
 GTAGGCCAATGATAGGAAGAACAAATAGATTATAAATACGTCAGAAATATAGTAGATA TGTTTTTATGTTTAGACCTCGTA  
 CATAGGAATAA TTGACGTTTTTTTTTTGGCCCAACATTTTGAAATTTTTTTTACCTCGCGCTGAGCCCAAACGGGCTCC  
 ACTACCGCGCGGTCGCCCATTTTGGGGAAGTCATCCGTCGCCAAAAGGAAATAGCCATAACATATCGTTACTGTTTGTGGA  
 ACATCGCCCGTTTCGCCCGATTCCGCCCTCAGCGGGTATAAAAGAGATCTTTTTTTTTTCTGGCTGTCCCCTTC  
 CATTTTTAAATGCTCTTATCTGCTCCTTTGTGATCTTACGGTCTCACTAACCTCTCTTCAACTGCTCAATAAATTTCCCGCT

[illegible]

FIG. 2A

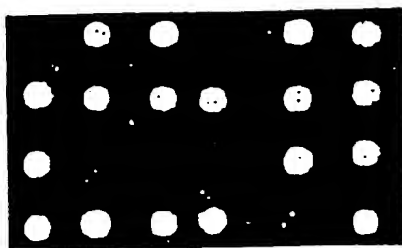
*mec1Δ/+ smt1Δ/+*

FIG. 2B

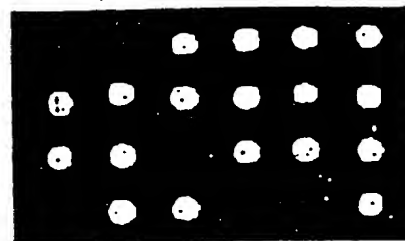
*mec1Δ/+ smt1Δ/+ dun1Δ/+*

FIG. 2C

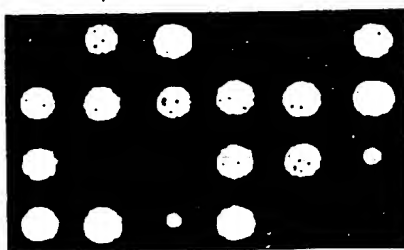
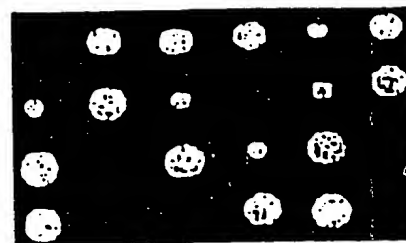
*mec1Δ/+ smt1Δ/+ tel1Δ/+*

FIG. 2D

*rad53Δ/+ smt1Δ/+*

5/21

FIG. 3A

*sml1* $\Delta$

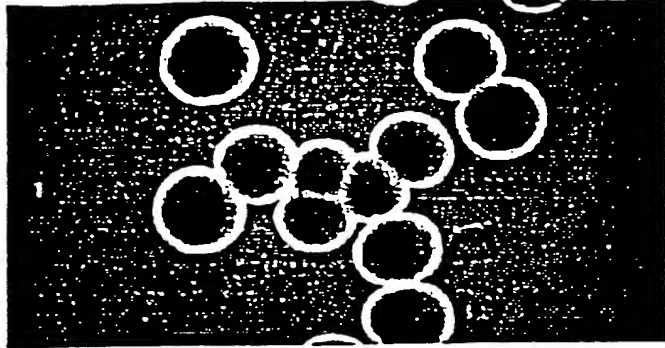


FIG. 3B

*SML1*

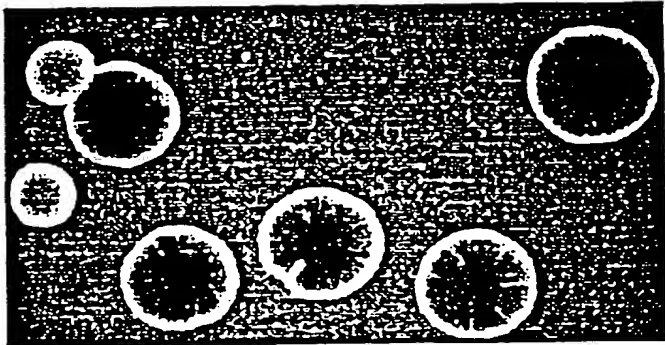
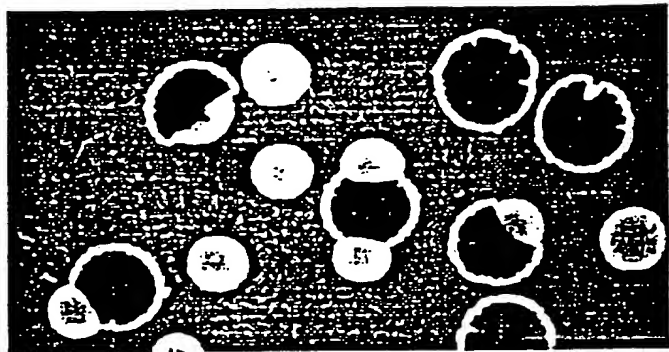


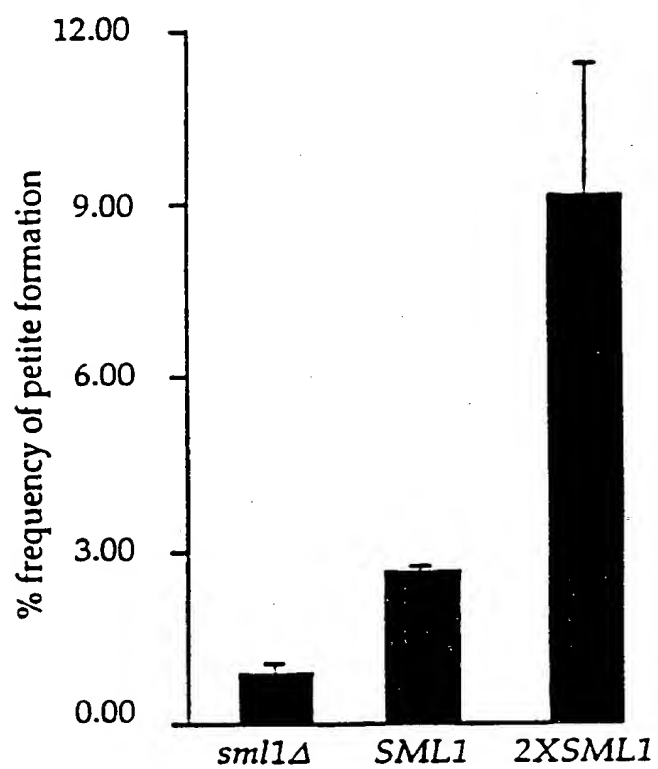
FIG. 3C

*2XSML1*



6/21

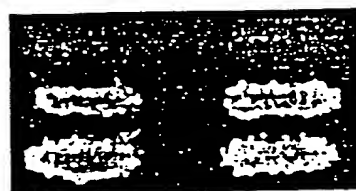
FIG. 3D



7/21

FIG. 3E

*mip1-1*  
*sml1Δ mip1-1*  
MIP1



YPGlycerol  
at 37°C

20250721 15:00



FIG. 4A

YPD

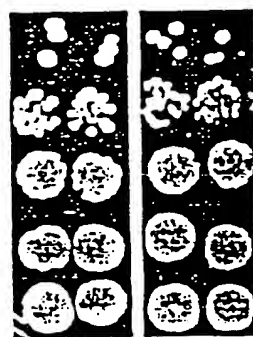


FIG. 4B

400 mM HU

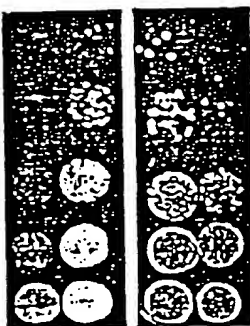
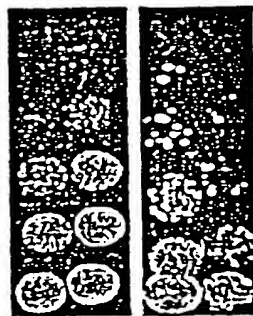


FIG. 4C

0.05% MMS



WT  
*sml1Δ*

WT  
2XSML1

100 mM HU

0.05% MMS

FIG. 4D

YPD

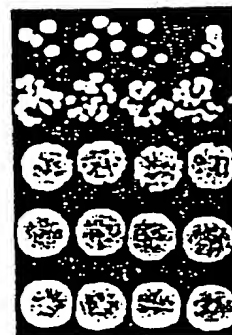


FIG. 4E

120 J/m<sup>2</sup>

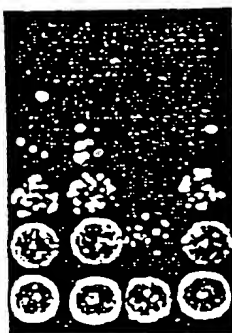


FIG. 4F

50 mM HU

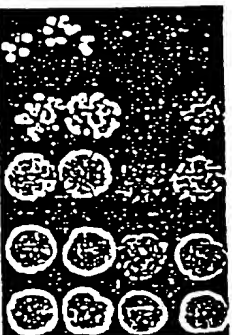


FIG. 4G

0.05% MMS



WT  
*sml1Δ*  
*dun1Δ*  
*dun1Δsml1Δ*

FIG. 5A

Wild-type

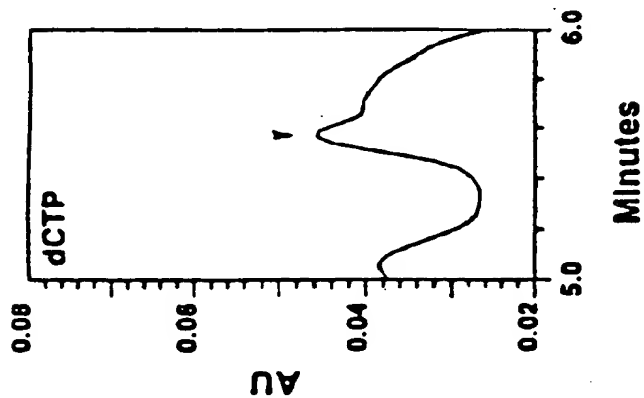


FIG. 5B

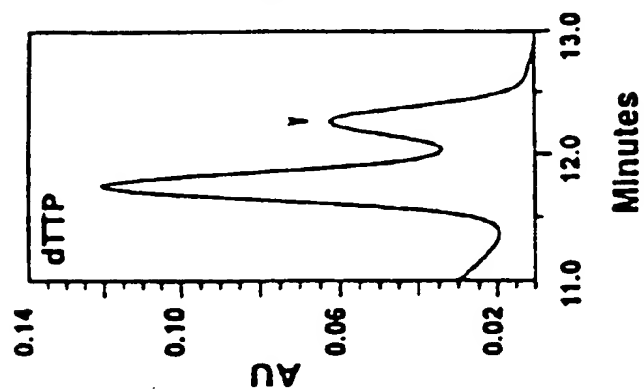


FIG. 5C

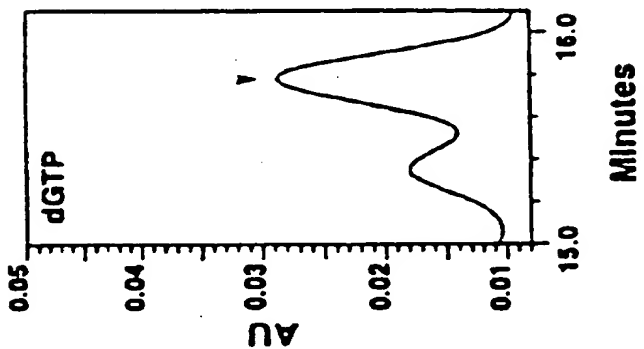
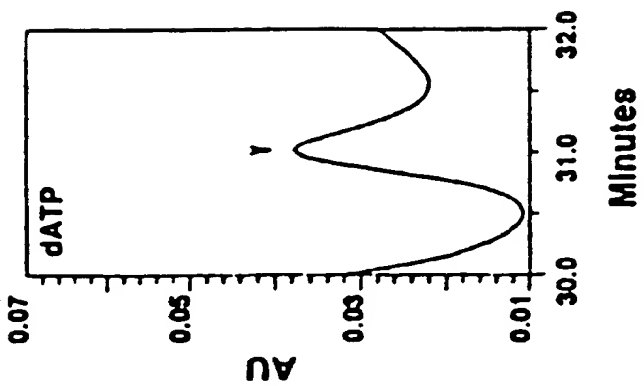


FIG. 5D



10/21

FIG. 5H

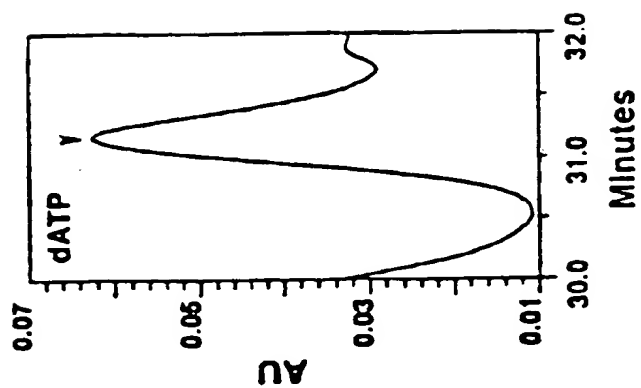


FIG. 5G

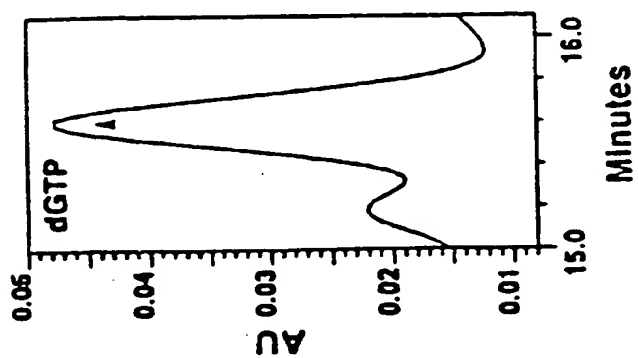


FIG. 5F

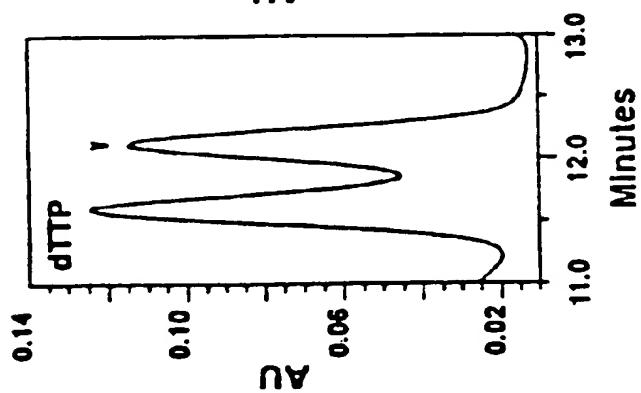
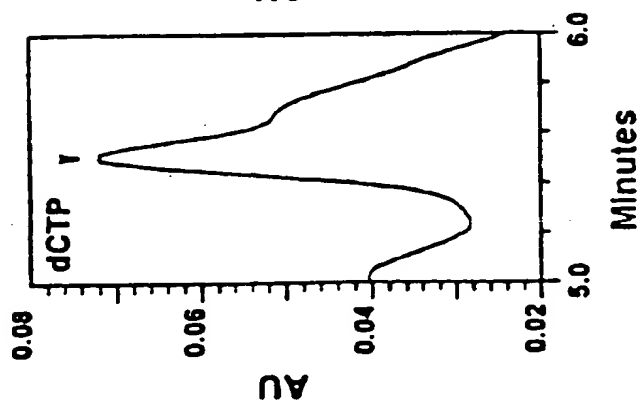


FIG. 5E



sm11Δ

[illegible][illegible][illegible]

Western blot analysis showing protein levels of RNR1, RNR2, RNR4, and ACTIN in WT, *mec1Δ*, and *sim1Δ* strains. The blot shows that RNR1, RNR2, and RNR4 levels are significantly reduced in the mutant strains compared to WT. ACTIN serves as a loading control and shows consistent levels across all lanes.

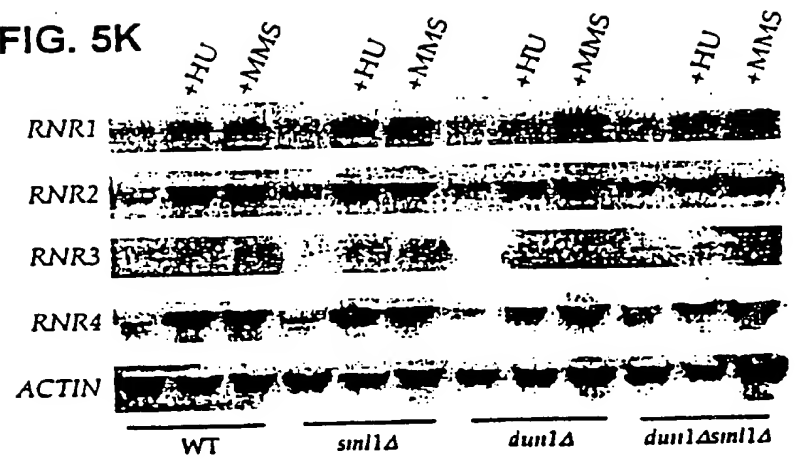


FIG. 6

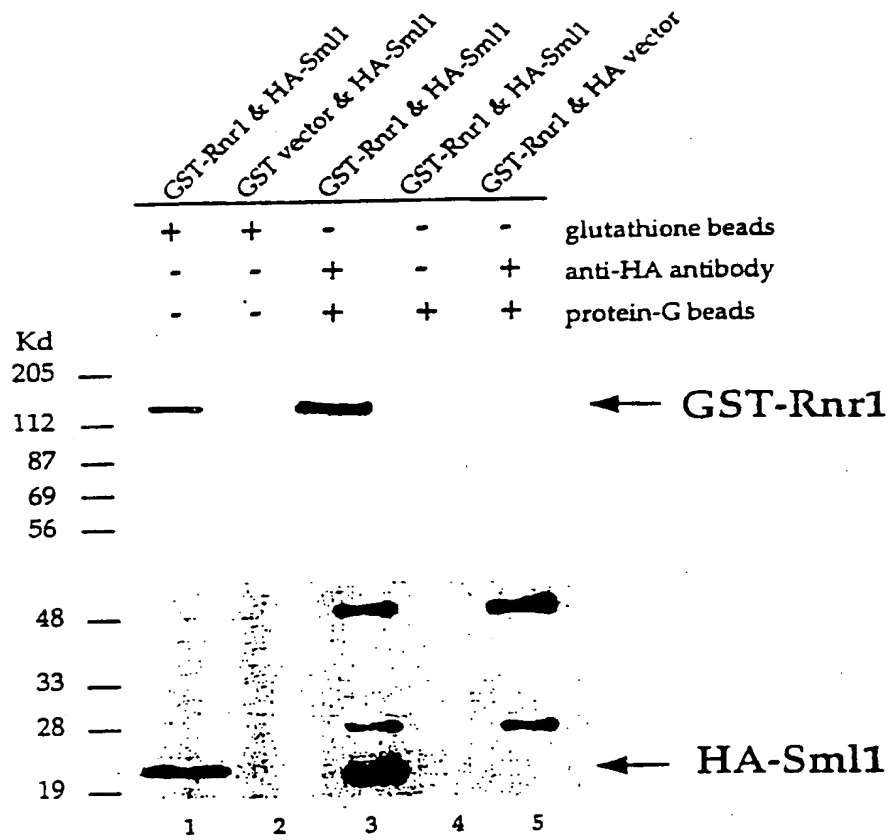
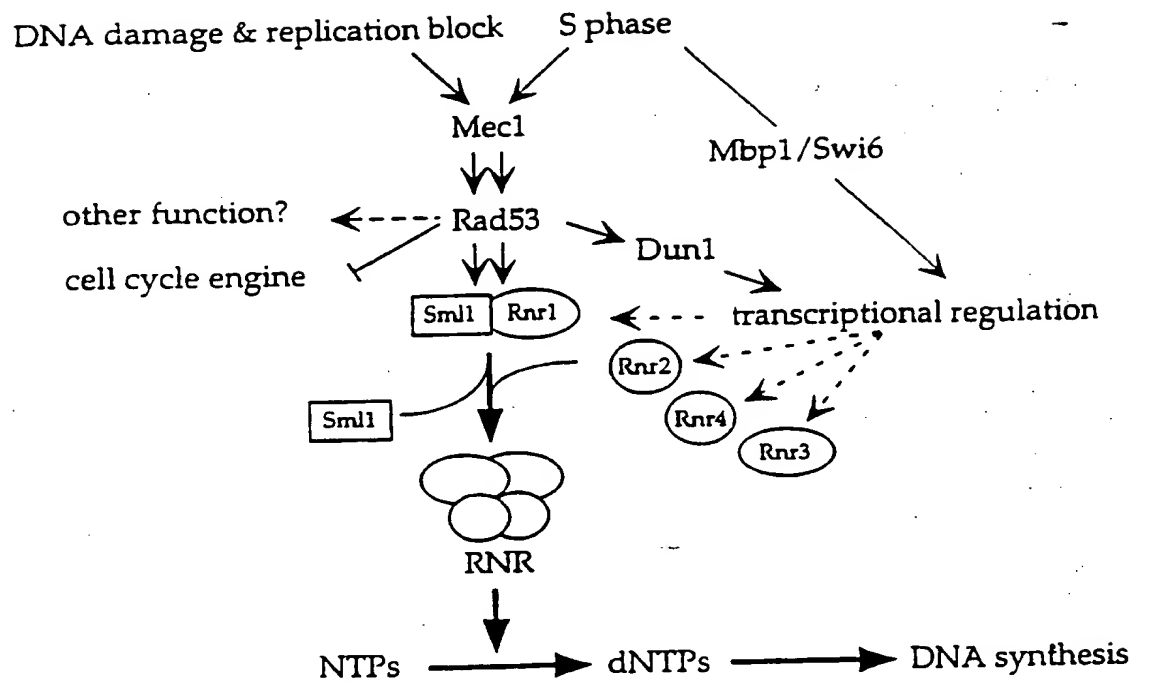


FIG. 7



15/21

1

2

3

4

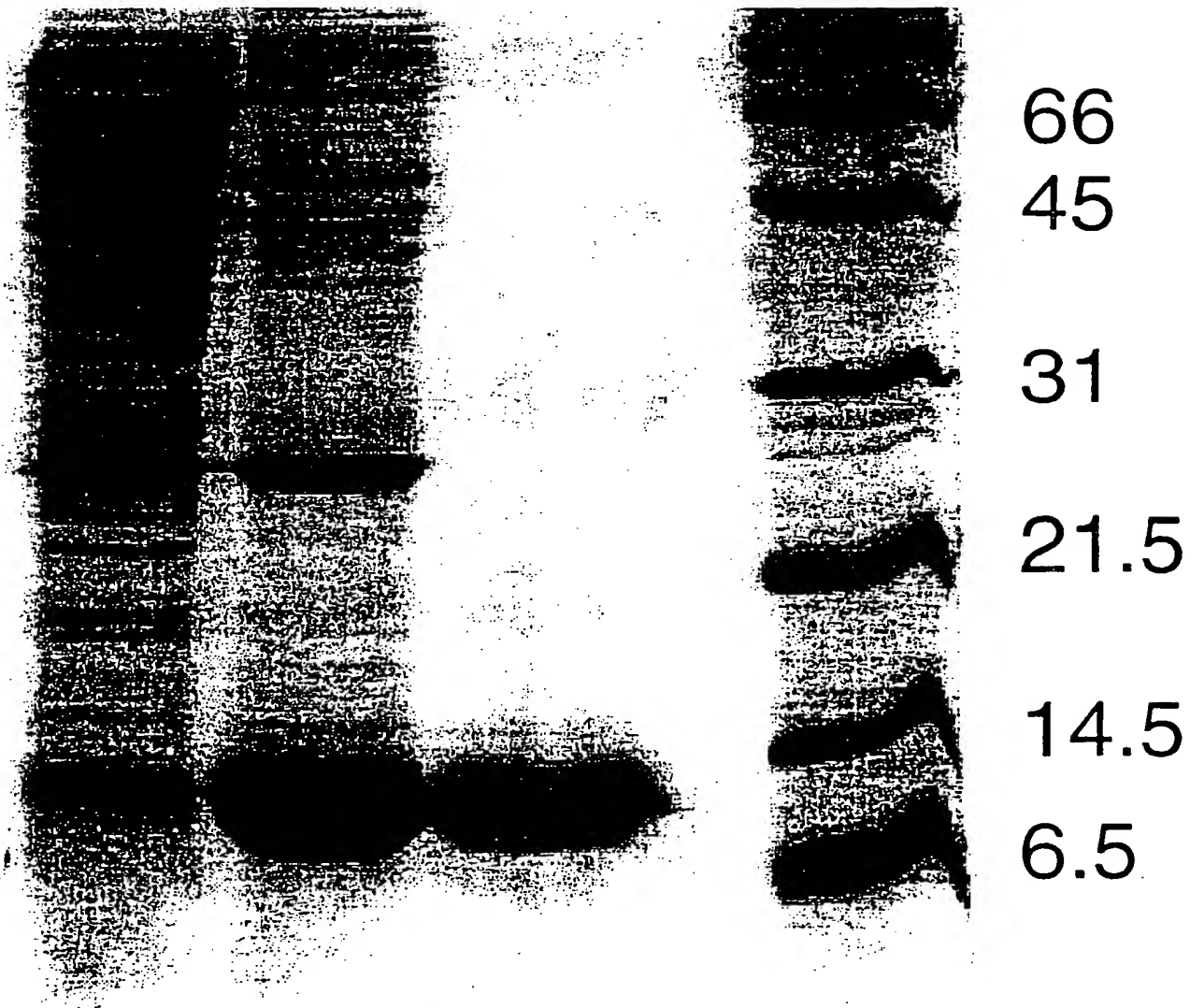


FIGURE 8



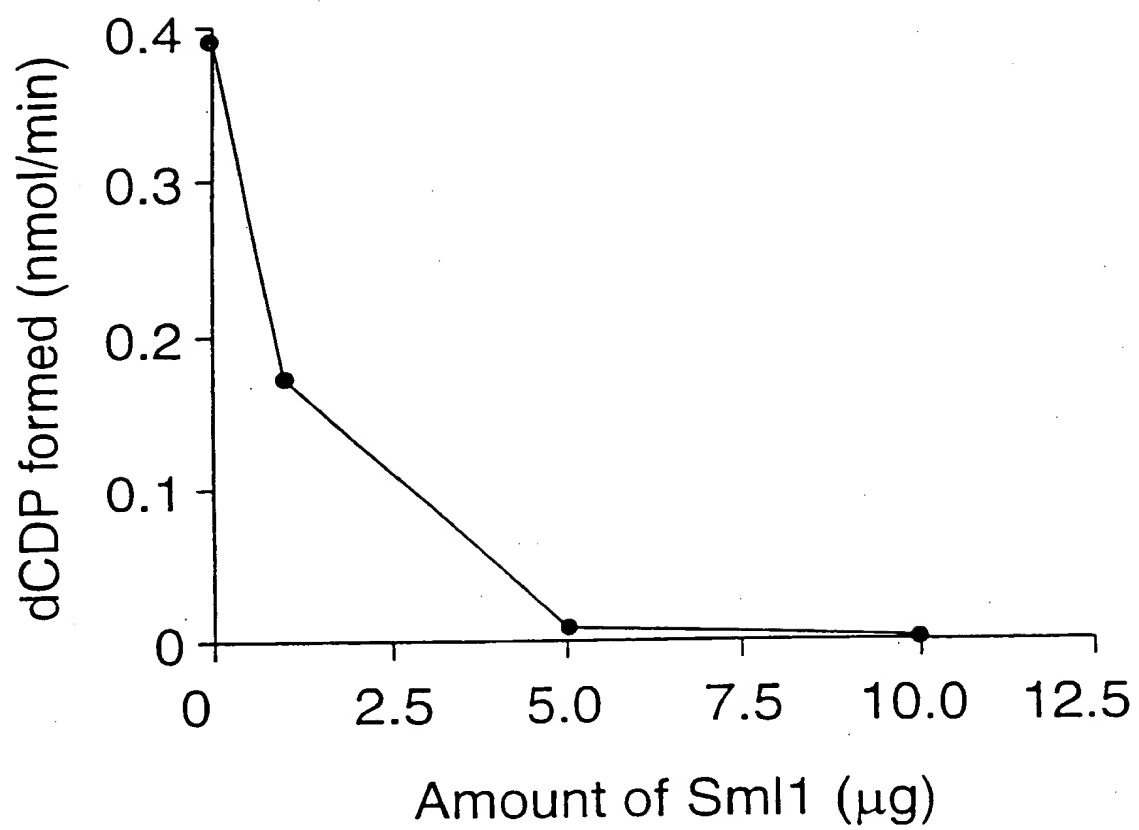


FIGURE 9

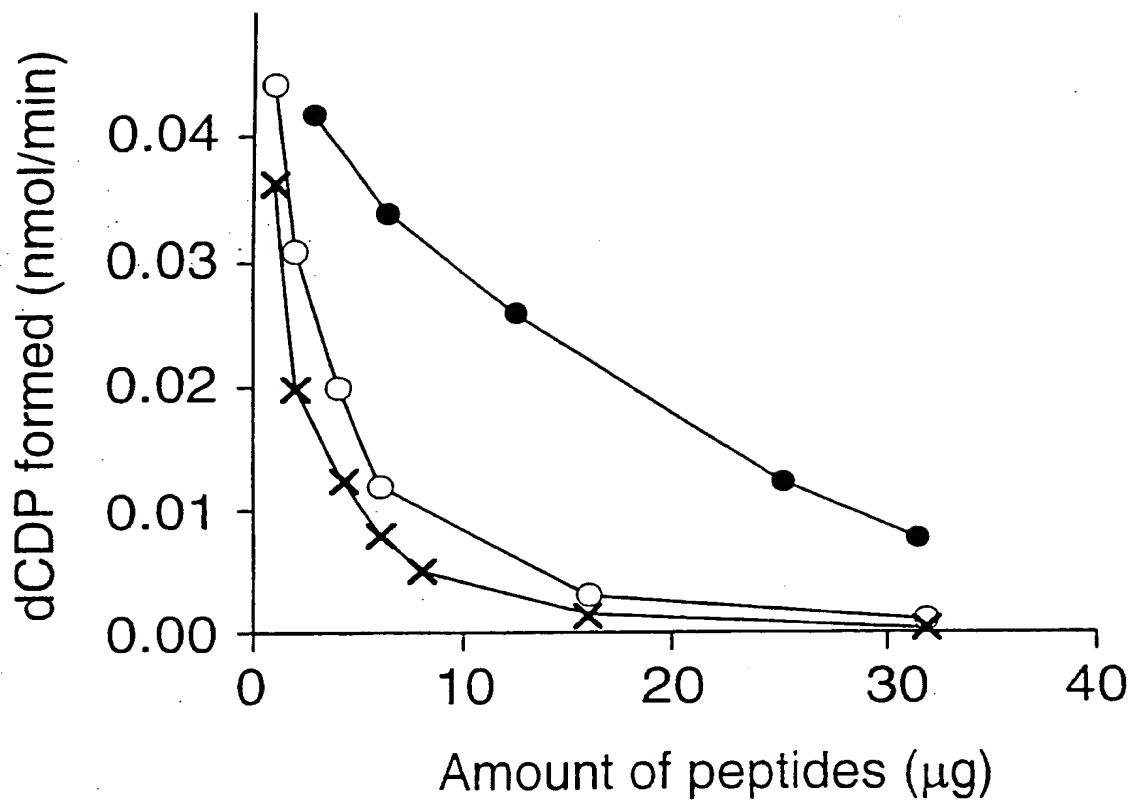


FIGURE 10

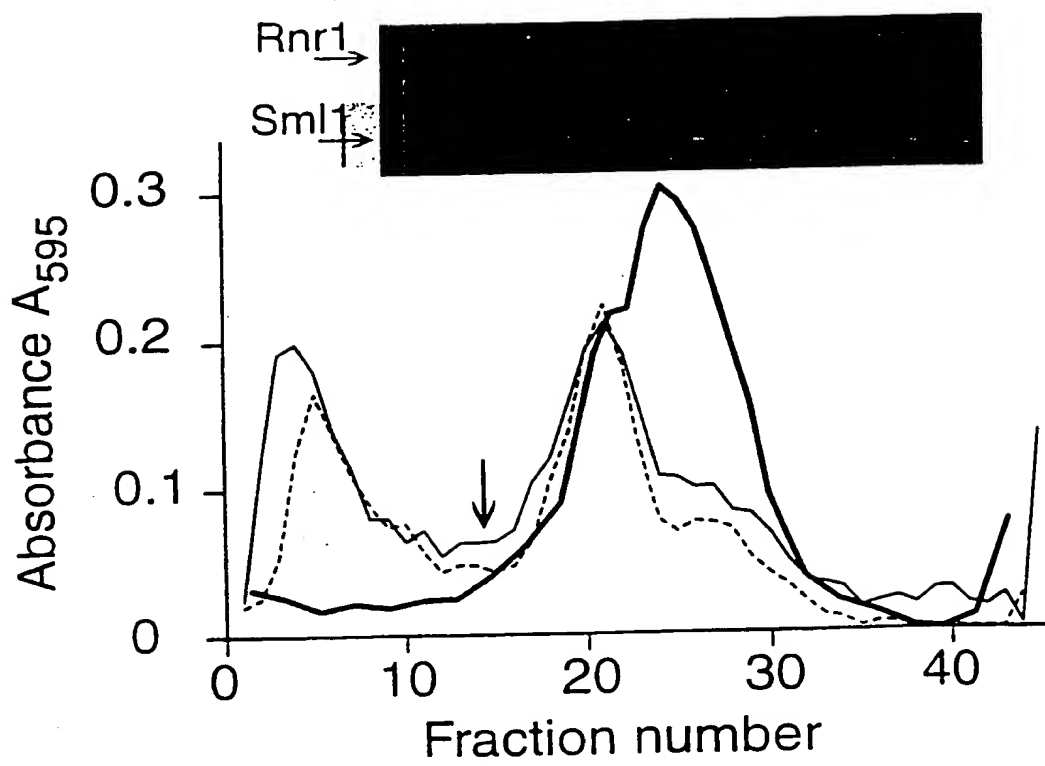
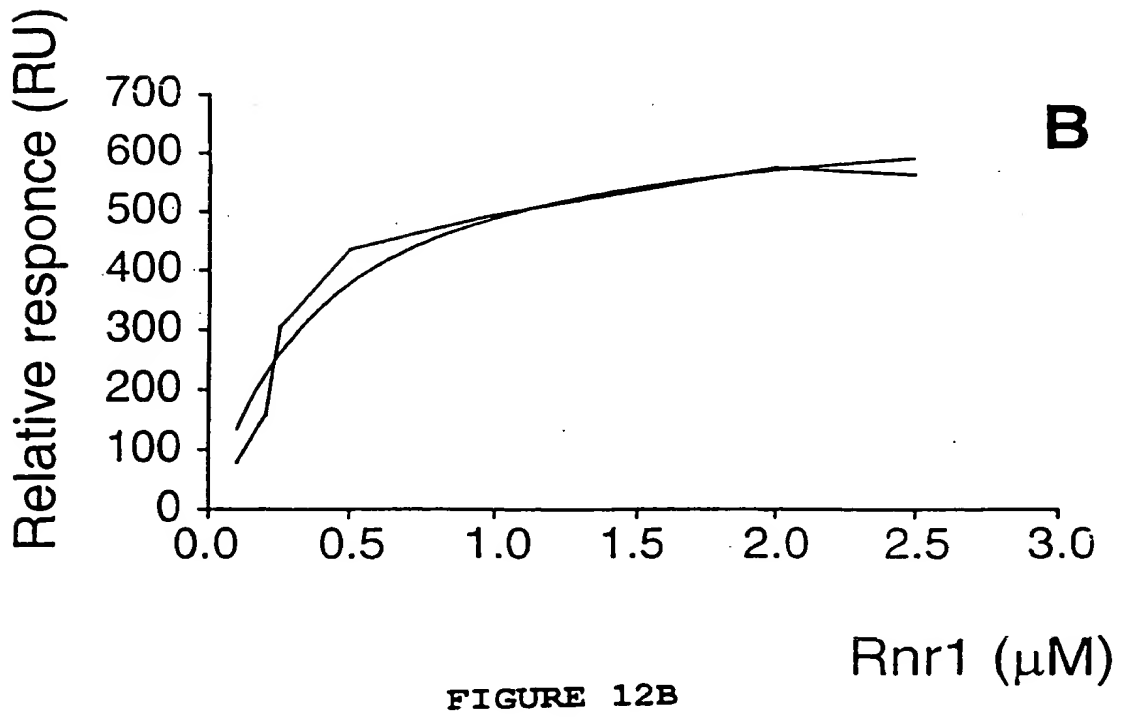
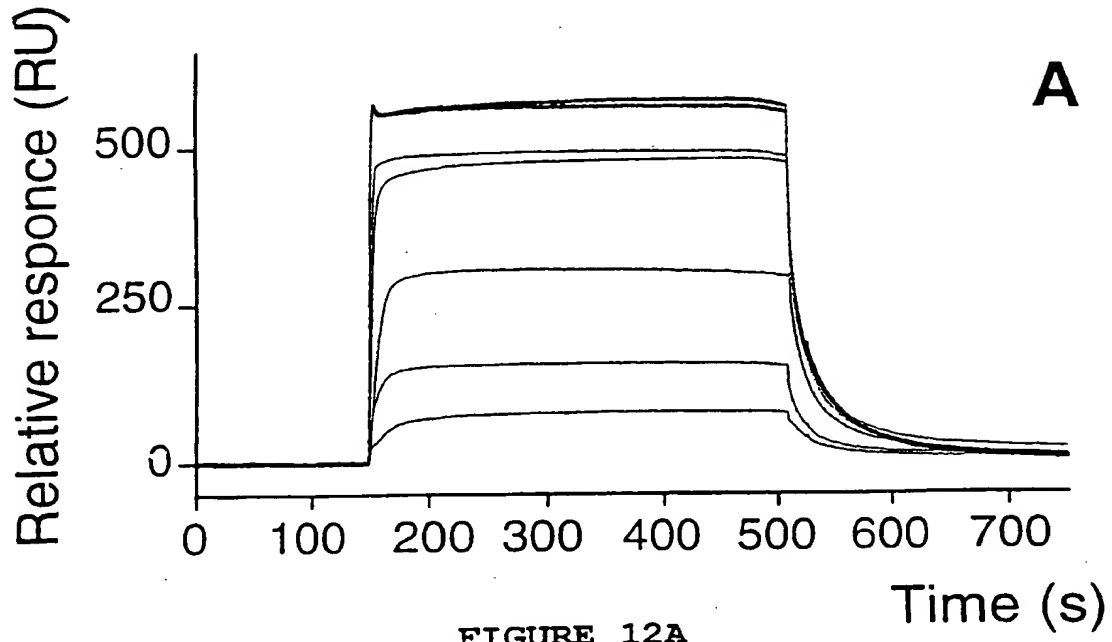


FIGURE 11

19/21



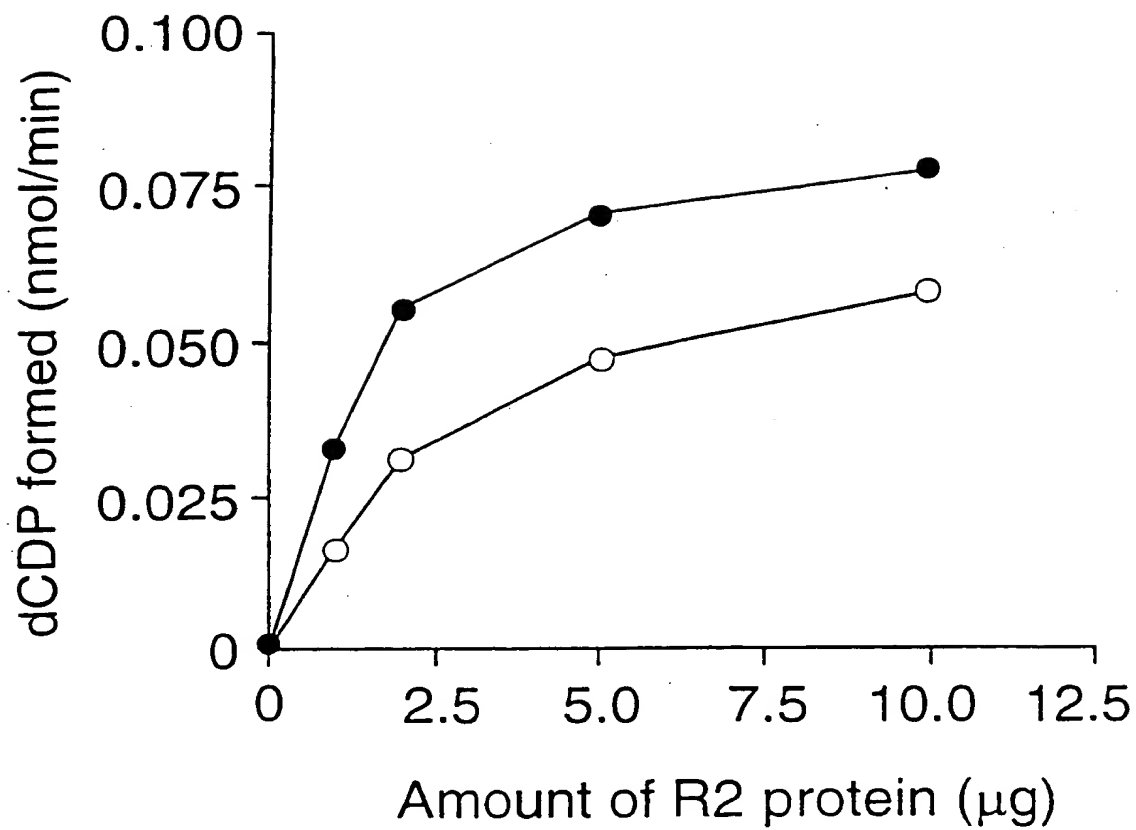


FIGURE 13

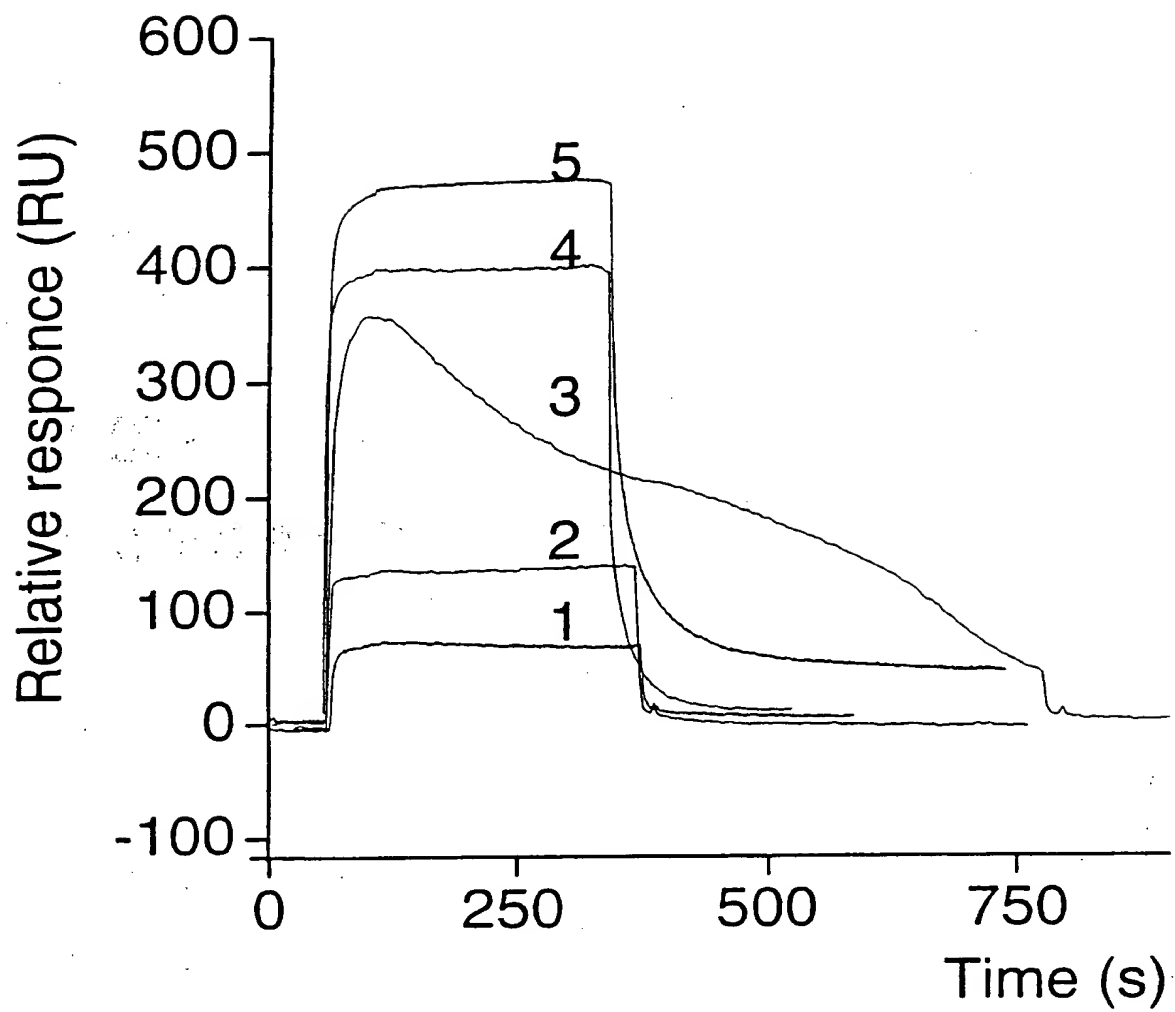


FIGURE 14